

Bibliographic Description of Documents in the Historical Context

Karima Tukubayeva

Scientific Library of L. N. Gumilyov Eurasian National University, Kazakhstan
karima.tukubaeva@mail.ru

Bibliographic description as a result of the centuries-old knowledge of the document at various stages of development is the basis of bibliographic information and one of the points of access to information resources. The aim of this paper is to reveal the peculiarities of the development of the bibliographic description of documents at various historical stages and to determine ways of improving bibliographic description on the basis of world trends. The study used comparative analysis of the experience of some countries in the development of standardization in the field of cataloging. The history of the bibliographic description has evolved in accordance with the trend of the times, adapting to new technologies and social demands of the scientific community. The whole historical development of the bibliographic description led to the need for its standardization. The most important problem was the development of unified international standards for bibliographic description and the alignment of national standards with international standards. Using a single method of bibliographic description unifies approaches in the field of cataloging information resources. The theoretical significance of the research lies in the fact that it reveals the essence of bibliographic description and the principles of its compilation. The historical and methodological aspects of the bibliographic description of the document are investigated beginning with its inception in antiquity and ending – in contemporary times. Practical significance and implementation of the research results consist in determining trends and prospects for the modern development of bibliographic description.

Keywords: bibliographic description, cataloging, standardization

In modern society, the role of documents increases as a type of information resources that represents both single information and whole arrays in information systems. This is due to the increase in the volume of knowledge, the emergence of new opportunities in the field of information technology, the development of science and technology, the formation of a global information space, the growth of opportunities and the increasing availability of Internet resources. The bibliographic description of the document is an important part of working with sources of information, as is attested from its existence almost from the same time that the first writing systems appeared. The bibliographic description is designed to systematize information about documents, to make it possible to identify and use them in the process of work, and it is a part of the bibliographic activity and has as its primary goal the satisfaction of users' information needs. Perfection of the

process of document description at all stages of its development was a necessity, a trend of the times, a public need, since it had to meet the user's requirements.

Bibliographic description (BD) appeared almost at the same time as the birth of the book. The first lists of BD were made on clay tiles in Nippur (Sumer, 2000 BCE) and Nineveh (Assyria, 650 BCE), on the stone walls of temples (the ancient Egyptian city of Edfu, 250 BCE, by other sources – 1800 BCE). These primitive BD often represented the first lines of works that at that time served as the title, sometimes the author's name and occupation. The origins of BD methods were laid down by the ancient Greek scientist and poet Kallimah in the bibliographic work "Tables of Those Who Became Famous in All Fields of Knowledge and What They Wrote in 120 Books" (250 BCE), based on a description of the Library of Alexandria. BD in the "Tables ..." is detailed and precise: the author is consistently given first place; aliases are revealed; the most correct title is chosen, if there are several; the date of writing is given, if possible; a quantitative summary is provided – according to the tradition of that era, the volume was calculated by the number of lines, since it was difficult to determine the number of glued sheets making up a papyrus scroll. In the Western Middle Ages, when monasteries began to appear in Europe, the BD methodology takes a step forward. The books kept in the libraries of the monasteries were subject to strict accounting, since they represented a considerable material value because of the high cost of parchment and the enormous amount of labor required to produce written works by hand (Shorin, 2016). The history of monastery libraries helps to restore the surviving records. The most popular is a summary of the books of forty steppe monasteries. This is a kind of a consolidated catalog, which includes 2,262 books from 40 of the country's largest monasteries. The inventory is drawn up according to a carefully thought out scheme. The most detailed description of books, richly decorated with precious stones, gold, silver and expensive materials, as well as books with illustrations is provided. The nature of the description of the books was as follows: first the name of the book, then its size and the material on which the book was written. According to some books, the number of lines or chapters was specified, than the initial letters and headings were written – in gold or paint (Rubanova, 2003). In monastic libraries, especially in large libraries, attempts were made to streamline the management of the library: certain rules for the description of books were gradually formed. This often described not only the books as a whole, but also some of their parts (speaking in modern language, it made an analytical description).

The greatest revolution in the culture of mankind was the spread and popularization of printing using moveable type, started in the 15th century. The appearance of these kind of printed books required the specification of their description, the inclusion in it of new information: the name of the creator, place and year of publication. The Swiss scientist and bibliographer Konrad Gesner (1516–1565) was one of the first to begin to indicate the number of sheets in the book and

began to apply in the description the author's headline. The latter was due to the increase in the overall number of authors and number of books written by each individual author, as well as the appearance of surnames. The growth of book collections in the libraries of the 17th century – also resulted in the need to develop rules for the description of books. In one of the early catalogs – the “Inventory of Books of Steppe Monasteries” (17th century), the descriptions of the books are more or less uniform, which gives grounds to note the well-known unification in the bibliographic technique of that time (Savina, 2006, p. 22). Between the 10th to 18th centuries the main centers of bibliographic activity were churches and monasteries, which kept significant book collections. In the 18th century the number of bibliographic centers expanded and public interest in information sources grew. There were also other centers for document description. Among them, publishers, which recorded the published books and periodicals, public libraries, archives, museums, educational institutions, initiators of document and book collections, and educators (Skipina, 2013, pp. 25–26).

A monograph by N. A. Nikiforovskaya (1981) “Bibliographic description in Russia: an outline of history until the middle of the 19th Century” covers a huge historical period from 1073 CE, from which dates the oldest surviving list of manuscript books – until the middle of the 19th century.

The beginning of the 19th century saw the first appearance of instructions on cataloging. In 1809, the director of the Imperial Public Library in St. Petersburg, Alexey Olenin wrote down her rules for describing books, improved them in 1819 and in this form had a great influence on the development of the methodology of BD. The development of the theory and methodology of description continued in the second half of the 19th century. The first manual on library management “On the organization of public libraries and compilation of their catalogs” published in 1859 by the librarian Vasily Sobolshchikov was the first instruction on description designed for a wide range of libraries. The merits of Sobolshchikov's instruction include his demand for a certain sequence of elements for a bibliographic description:

- 1) The author's name, if known, or the main word of the title.
- 2) The title of the book.
- 3) Place of publication, publisher, year of publication.
- 4) Format.
- 5) Number of pages, illustrations.
- 6) Type of binding (Gilyarevsky, 1961).

Abroad in the second half of the 19th and early 20th centuries intensive work was carried out to identify and form the basic principles of description. A noteworthy trail in the theory of description was left by C. Ketter (1837–1903), one of the

prominent American librarians. In 1876 he published "Rules for compiling a dictionary catalog" which survived four editions. In them, Ketter clearly formulated the principles of description, which are reduced to two main provisions: books should be described under the author's name; if he is unknown – under the first word of the title. In the 19th century book-description theory took a new major step. This century is characterized by the appearance of national codes of book publishing, their improvement and attempts to create international rules for the description of works of the press. In the years of 1908–1909 the national regulations of many countries were influenced by the two most important arches: the Anglo-American and Prussian instructions (Savina, 2006, p. 24).

In the USSR, the regulation of the bibliographic description at the beginning of the 20th century was greatly advanced. In 1917 the Russian Book Chamber was opened, which became the main center for bibliography, later it launched the activity of cataloging commissions, which developed the general rules for processing and describing information. However, from the 1930s up to the 1950s the activities of bibliographic centers were constrained by the situation in the country. In those years many documents were taken from libraries, transferred to special storage, and access to information sources was limited. From the 1960s – up to the early 1970s the situation began to be corrected, work was carried out on the adoption of state standards regulating bibliographic activities, and the SIBID system (the System of Information, Library and Publishing Standards) began to take shape, the rules of which have been adjusted in the time following (Skipina, 2013, p.26).

Today, BD is used in various types of activities – bibliographic control, access to, scientific information, in the library, publishing, bookselling, other branches of science and the national economy outside the library. The main requirement for BD is reliability, therefore BD is made up of "de visu" (this Latin expression means "by one's own eyes", or based directly on the document). The following requirements also apply to BD:

- 1) The BD should be objective and purposeful.
- 2) The BD shall accurately and fully reflect the characteristics of the document by using the fewest number of elements to identify it.
- 3) BD should be short, clear and easily visible.
- 4) BD should be uniform, regardless of the field of application.

BD consists of large structural units – areas, which in turn are divided into elements. BD is the main component of the bibliographic record, documenting information about the record, allowing it to be identified, disclosing its composition and content for bibliographic search purposes (Sukiasyan, 2012, p. 28). In the evolution of the bibliographic description as a special collapsed language of culture and communication, a transition to resource terminology is noted: "BD

terminology has always sought to keep pace with time: from the scroll to the book (code, printing, publishing, document), and finally – to the resource. The development of the description proceeded from one or two elements to a multi-element record form for a separate library – to the rules for the entire country, and as the development and strengthening of international relations proceeded – to rules common to the whole world (Safiullina, 2016).

The modern theory and practice of BD is constantly being improved. The cataloging practice of most libraries in Kazakhstan is based on the standards included in the SIBID system, which, to date, have lagged behind the current level of requirements for bibliographic information, do not reflect international changes and insufficiently reflect the features of the methodology for describing electronic resources. In Russia, in addition to the SIBID standards, Russian cataloging rules are used that develop the provisions of the basic standards: GOST 7.1–2003 “Bibliographic Record. Bibliographic Description. General Requirements and Rules of Compilation”, GOST 7.80–2000 “Bibliographic Record. Header. General Requirements and Rules of Compilation” and take into account international developments in the field of scientific information processing, such as the “Declaration on international cataloging principles”, the research on functional requirements for bibliographic and authoritative records (FRBR and FRAD), the new versions of the “International standard bibliographic description (ISBD)”, including the consolidated ISBD (Shaparneva, 2009).

The cataloging rules were common for decades for the libraries of the former Soviet state. Why not in the age of digital technologies and global changes in world cataloging use joint, agreed rules common for all libraries. In our opinion, the consolidated ISBD – a remarkable document, combining the advantages of all specialized systems, corresponds to the international principles of cataloging. The new version of ISBD retains the basic structure of regions and elements in the bibliographic description, but includes a new area that replaces the element “General designation of the material” – “The field of the form of content and type of means” with three elements: the form of content, the content characteristic, and the type of facility. This area is designed to indicate at the beginning of the record the main form in which the type of media and the content of the resource are expressed (Bakhturina, 2011). Most of the national cataloging rules are based on ISBD. However, in the International Library Community there is a confrontation between two standards: International Standard Bibliographic Description (ISBD) and Resource Description and Access (RDA). RDA is the successor of AACR2 (Anglo-American Cataloging Rules, 2nd edition). The developers of the RDA proceeded from the desire to modernize AACR2 for the electronic world of the 21st century, to reorganize the rules in order to achieve greater consistency, to make the rules more international and to call for cooperation with other communities working with metadata outside the library world to facilitate the exchange of data with producers and users of information resources in all formats. RDA is designed

to become Web-oriented, but extends to printed versions. The RDA takes the library world one step closer to becoming technologically more advanced, as it provides an opportunity to take advantage of the semantic network and related data when using the framework principles to describe resources (Resource Description Framework code – RDF). This makes it easy to manipulate data, which in turn opens the door to limitless opportunities for sharing data outside the library space (National Bibliography in the Electronic Age, 2009). At the level of the IFLA, work is under way to harmonize the ISBD and the RDA, in search of alternative steps to creating “joint cataloging rules”.

Currently, almost all scientific libraries in the USA are focused on teaching new standards to the new generation. These are not based on MARC formats. So the BIBFRAME system (Bibliographic Framework Initiative) is the basis for a future bibliographic description intended for wider integration into the information community. The model is an important attempt to present bibliographic objects as related data at a higher level. The BIBFRAME2.0 model contains three classes:

The work (the highest level of abstraction, the conceptual essence of the cataloged resource): authors, languages and what this material (subject) is about.

The sample (Instance). A work can have one or several material incarnations, for example a particular publication. Also in this class is information such as the publisher, the place and date of publication, and the format.

The unit of storage (Item). This is a real specimen (physical or electronic) of the sample; information such as location (physical or virtual), a shelf number, or a barcode. Each of the classes contains various bibliographic information, such as the author, the place of publication and the location of the document, and all this is organized into more useful information. It is assumed that BIBFRAME will allow the integration of bibliographic information into more extensive arrays of global networked data (Bakhturina, 2017).

Summarizing the foregoing, it should be noted that the history of the bibliographic description has evolved in accordance with the trend of the times, adapting to the new technologies and social needs of the scientific community. The entire historical development of the BD led to the need for its standardization. The issues of standardization of information resources in the field of information resources at the present stage are of very great importance, both for science and for practice. The most important problem was the development of unified international standards for BD and alignment of national standards with international standards. The modern user in search of information finds it more convenient to access the Internet than library catalogs (even electronic ones). Library catalogs, despite all the wealth of information contained in them, remain largely isolated from the rest of the information field and inaccessible to search engines on the Internet. Accepting this fact and understanding that in the modern

world such an isolated existence is a way to nowhere, the library community in recent years has been looking for ways that would ensure the integration of library data into the universal information space. The most promising in this respect is the use of the Semantic Web (Zhlobinskaya, 2012) and related data. Links should add flexibility in describing the resource and improve the positioning of library resources in the Web environment. The bibliographic data changes its nature and becomes metadata that can be represented in different networks and formats for maximum compliance with new challenges. Given the international trends, the transition to the environment of related data (Linked Data) and semantic Web is inevitable. These projects, in one way or another, are in the sphere of attention of our specialists, mainly in terms of theoretical comprehension. In order to provide free access to information, the Kazakhstan library community needs to take advantage of the experience of foreign colleagues in presenting library data on the Web.

References

- Bakhturina, T. A. (2011). The future of cataloguing in the CIS countries: decision-making time. *Journal of the Eurasian Library Assembly*, 3, 65–72. Retrieved from <http://www.nilc.ru/finder>
- Bakhturina, T. A. (2017). From MARC21 to the BIBFRAME model: the evolution of machine-readable formats Library of Congress. Retrieved from <http://www.nilc.ru/finder>
- Fundamentals of bibliographic knowledge: teaching and practical guide (2016). Saratov.
- Gilyarevsky, R. S. (1961). The development of modern principles of writing: a brief essay. Moscow.
- Kasparova, N. H. (2012). Cataloguing in the early 21st century: the main domestic and international trends in the development of methods of bibliographic description: Report to the Plenum of The interregional Committee on cataloguing, 18 April 2012, Moscow. Retrieved from <http://www.nilc.ru/finder>
- Lastochkina, N.V., Semenova, O. F. (n.d.) Role and responsibilities of the cataloger in the present and in the future: the situation in Academic Libraries of Russia and the USA. Retrieved from <http://www.cnshb.ru/elib/psot/text/1544791.pdf>
- National Bibliography in the Electronic Age: Leadership and New Directions for Development (2009). *Series of publications of the IFLA bibliographic records*, vol. 39. Retrieved from <https://www.ifla.org/files/assets/hq/publications/series/39-ru.pdf>
- Nazarchuk, T. B. (2016). "Catalography" E. I. Shamurin as a guide to bibliographic description of documents. *Scientific Bulletin of Crimea*, 4 (4),4. Retrieved from <http://nvk-journal.ru/index.php/NVK/article/viewFile/60/89>

- Nikiforovskaya, N. A. (1981). Bibliography description in Russia: history essay until the middle of the 19th century. Leningrad: Nauka.
- Rubanova, T. D. (2003). History of libraries: Ancient world – Middle ages – Age of Enlightenment. Chelyabinsk.
- Safiullina, A. Z. (2016). Social memory: library and bibliographic representation in the past, present and future. Moscow; Berlin: Direct Media. Retrieved from <https://books.google.kz/books?id>
- Savina, I. A. (2006). Bibliographic description of the document: educational-methodical recommendations. Saint-Petersburg: Profession.
- Skipina, I. V. (2013). Bibliographic description of the document. Retrieved from http://www.tmnlib.ru/jirbis/files/upload/books/PPS/Skipina_185_UP_2013.pdf
- Sukiasyan, E. R. (2012). Introduction to contemporary cataloging: a Handbook for professional self-education. Moscow: Litera.
- Shaparneva, M. A., Bokan M. G. (2009) Russian cataloging rules. *Newsletter of the RBA*, No. 51, 103–104.
- Shorin, O. N. (2016). Methods and algorithms for integration of a large volume of bibliographic records in the open semantic space: dissertation for the degree of candidate of technical sciences. Saint-Petersburg. Available from http://www.frccsc.ru/sites/default/files/docs/ds/002-073-02/diss/01-shorin/ds02_dis001_shorin.pdf?76
- Zhlobinskaya, O.N. (2012). Semantic Web, linked data and libraries. *11th Scientific and practical conference "Participants and users of LIBNET national information and library center" LIBNET-2012, Zvenigorod, Moscow region, November 19–23, 2012*. Available from <http://www.nilc.ru/finder>